

**DIRECT TESTIMONY OF**  
**MICHAEL D. SHINN**  
**ON BEHALF OF**  
**SOUTH CAROLINA ELECTRIC & GAS COMPANY**  
**DOCKET NO. 2016-2-E**

1   **Q.   PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND CURRENT**  
2       **POSITION.**

3   A.       My name is Michael D. Shinn, and my business address is 220 Operation  
4       Way, Cayce, South Carolina 29033. I am currently employed by SCANA Services,  
5       Inc. as General Manager of the Fuel Procurement and Asset Management  
6       Department (“Fuel Department”).

7   **Q.   PLEASE BRIEFLY SUMMARIZE YOUR DUTIES WITH SOUTH**  
8       **CAROLINA ELECTRIC & GAS COMPANY (“SCE&G” OR**  
9       **“COMPANY”).**

10 A.       My responsibilities include managing the purchase and delivery of coal, No.  
11       2 fuel oil, and limestone on behalf of the Company and as agent for South Carolina  
12       Generating Company (“GENCO”). In January 2016, I also became responsible for  
13       uranium procurement functions for the nuclear generating facilities operated by  
14       SCE&G. These responsibilities include the contracting for natural uranium and  
15       conversion services.

1 **Q. DESCRIBE YOUR EDUCATIONAL BACKGROUND AND YOUR**  
2 **BUSINESS EXPERIENCE.**

3 A. I earned a Bachelor of Science Degree in Mechanical Engineering from the  
4 University of South Carolina in Columbia, South Carolina, in 1995. While in  
5 college, I was a student intern in the Fossil Hydro Power Plant Performance Group  
6 for five years. Since graduation, I have held various positions within the Fuel  
7 Department to include managing rail transportation and delivery, spot coal  
8 purchasing, coal quality management, synthetic fuel optimization, and state and  
9 federal regulatory reporting. While Manager of Fuel Technical Services, Industrial  
10 Coal and Synfuel, I worked with coal suppliers and SCE&G's power plants to  
11 increase fuel and transportation flexibility as well as to maximize the utilization of  
12 the Company's assets. In December 2009, I was promoted to General Manager of  
13 the Coal and Oil Procurement Department, and in January 2016, I assumed my  
14 current position.

15  
16 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

17 A. The purpose of my testimony is to describe the procurement and delivery  
18 activities for coal and No. 2 fuel oil used in electric generation for SCE&G as well  
19 as GENCO's Williams Station for the period January 1, 2015, through December  
20 31, 2015 (the "Review Period"). I also discuss changes that have occurred in coal  
21 markets since the last annual fuel adjustment hearing and how these changes  
22 affected coal procurement during the Review Period. My testimony also describes

1 the procurement and delivery of limestone for our wet scrubbers located at the  
2 Wateree and Williams steam plants.

3  
4 **Q. PLEASE DESCRIBE GENCO AND ITS RELATIONSHIP TO SCE&G.**

5 A. GENCO was incorporated on October 1, 1984, and owns Williams Electric  
6 Generating Station. GENCO sells to SCE&G the entire capacity and output from  
7 Williams Station under a Unit Power Sales Agreement approved by the Federal  
8 Energy Regulatory Commission. Hereafter, when I refer to SCE&G's fossil steam  
9 plants, I include GENCO.

10  
11 **Q. PLEASE SUMMARIZE SCE&G'S FUEL PROCUREMENT NEEDS AND**  
12 **PURCHASING PRACTICES.**

13 A. The Fuel Department purchases all coal, No. 2 fuel oil, limestone, and  
14 associated transportation for SCE&G's fossil plants focusing on reliability of  
15 supply, conformity with operational and environmental requirements, and  
16 reasonable prices. Given its mix of generation assets, SCE&G has significant need  
17 for coal in any given year to provide reliable energy service to our customers. In  
18 2015, for example, SCE&G consumed 3,746,035 tons of coal in the production of  
19 electricity for its customers. This amount was 902,669 tons of coal less than the  
20 Company burned in 2014, which is a decrease in the burn rate for coal of 24.10%  
21 using a year-over-year comparison.

1 **Q. WHAT FACTORS LED TO THE DECREASE EXPERIENCED IN THE**  
2 **BURN RATE FOR THE REVIEW PERIOD?**

3 A. During the Review Period, SCE&G increased utilization of its natural gas  
4 electric generation facilities as a result of increased availability and decreased prices  
5 of natural gas. Conditions in the natural gas market also contributed to reduced  
6 market prices for purchased power, and, consequently, SCE&G entered into more  
7 purchased power contracts in 2015. Additionally, McMeekin Station was converted  
8 to a dual-fuel facility in April 2015, allowing the plant to burn natural gas instead  
9 of coal if economical and available. This enhanced generation capability resulted in  
10 McMeekin consuming only 144,000 tons of coal in 2015 as compared to 522,395  
11 tons in 2014. Recent weather events also allowed SCE&G to significantly increase  
12 generation at its hydroelectric facilities. Finally, milder weather in the late fall of  
13 2015 led to less demand on SCE&G's system thus further contributing to the  
14 reduced burn rate during the Review Period.

15  
16 **Q. WHAT DO YOU EXPECT THE BURN RATE FOR COAL WILL BE IN**  
17 **2016?**

18 A. The Company projects that its burn rate for coal in 2016 will be  
19 approximately 3,362,146 tons, representing a decrease of 10.2% when compared to  
20 the burn rate in 2015. This projected reduction is largely attributed to the continued  
21 utilization of SCE&G's natural gas electric generation facilities and low gas price  
22 projections for the entire year of 2016. In addition, McMeekin Station will convert

1 entirely to natural gas in April 2016, thus further reducing the Company's total burn  
2 rate for coal.

3  
4 **Q. HOW DOES THE COMPANY SECURE NECESSARY QUANTITIES OF**  
5 **COAL AND NO. 2 FUEL OIL AT COMPETITIVE PRICES?**

6 A. SCE&G maintains an active list of qualified suppliers of coal and No. 2 fuel  
7 oil. Typically, as contracts expire or needs are identified, solicitations are issued for  
8 competitive sealed bids. Responses to these solicitations inform our knowledge of  
9 market demand and prices. Moreover, because the responses to these solicitations  
10 often include proposals for coal supplies with specifications different than the  
11 requested specifications, these responses also aid our ongoing efforts to ascertain  
12 price differences for varying qualities of fuels.

13  
14 **Q. HOW DOES SCE&G APPROACH THE MARKETPLACE FOR COAL AND**  
15 **NO. 2 FUEL OIL?**

16 A. Coal is procured under long-term (more than one year) and spot purchase (up  
17 to one year) agreements to achieve a balance of reliable supplies while maintaining  
18 flexibility to react to market changes or short-term system needs. Under normal  
19 market conditions, SCE&G seeks to have long-term purchases represent  
20 approximately 75% to 80% of projected system demand. Spot purchases provide a  
21 mechanism to manage inventories and react to short-term changes in the  
22 marketplace, and generally represent 20% to 25% of projected system demand.

1  
2 In contrast to the complexities of coal purchasing contracts, contracts for No.  
3 2 fuel oil are requirements contracts that are competitively solicited every two years.  
4 Generally, pricing for these contracts is based upon market indices that are adjusted  
5 daily.  
6

7 **Q. PLEASE SUMMARIZE THE COMPANY'S COAL PURCHASES DURING**  
8 **THE REVIEW PERIOD.**

9 A. The Company took delivery of 2,572,305 tons of coal under long-term  
10 agreements and 839,656 tons of coal through spot purchases during the Review  
11 Period. As a whole, long-term agreements provided 75.39% of the requirement for  
12 the Company's coal-fired stations, while spot purchases accounted for the remaining  
13 24.61% of SCE&G's coal requirements during 2015. In sum, combined operational,  
14 weather, and market conditions impacted SCE&G's balance of coal purchases in  
15 the Review Period, resulting in a percentage of spot purchases of coal in the normal  
16 range.  
17

18 **Q. FOR 2016, PLEASE EXPLAIN THE COMPANY'S PLANS FOR**  
19 **ADDRESSING ITS NEEDS FOR COAL SUPPLIES UNDER LONG-TERM**  
20 **CONTRACTS AND SPOT PURCHASES.**

21 A. While SCE&G's goal has been and remains one of balancing its purchases  
22 of coal between long-term and short-term contracts, market conditions and

1 operational demands may alter this balance in any given year. Current market  
2 conditions provide an opportunity for the Company to change its mix between coal  
3 purchases made under long-term contracts and spot purchases. The present state of  
4 the coal market is such that many domestic coal producers have been forced to lay  
5 off employees, retire assets, file for bankruptcy, and close (both short- and long-  
6 term) mines that either supply the Company or have supplied the Company with  
7 coal in the recent past. With the expansion of eastern utilities into non-traditional  
8 coal basins and the proliferation of combined-cycle gas generation, the economic  
9 outlook for domestic Central Appalachian (“CAPP”) suppliers remains difficult and  
10 uncertain. Millions of tons of coal production have been taken offline in the last  
11 couple of years due to the reasons noted above, and it is expected that more coal  
12 production will be retired in 2016. This trend is expected to continue until after the  
13 Mercury and Air Toxics Standards (MATS), which set limits on emission limits for  
14 mercury, particulate matter as a surrogate for toxic metals, and hydrogen chloride  
15 as a surrogate for acid gases have been fully implemented in April 2016.  
16 Accordingly, the availability of long-term supplies has been diminished.

17 In addition, forward price curves for coal have recently tended to merge  
18 lower toward spot prices, rather than spot prices advancing upward toward the  
19 forward price curves. This pricing reality is continuing to provide more favorable  
20 outcomes for our customers when the Company is able to use more spot purchases  
21 of coal.

1 For these reasons, SCE&G expects to adjust the balance of its coal purchases  
2 in favor of a greater percentage of spot purchases in 2016. This anticipated  
3 adjustment is largely due to the significant decrease in natural gas prices as well as  
4 the availability of expanded purchased power opportunities. The burn rate of  
5 SCE&G's coal plants also has the potential to fluctuate as the result of changes in  
6 the price of coal or natural gas. Shifting the balance of coal purchases to a greater  
7 number of spot purchases therefore will give the Company the flexibility to manage  
8 its coal inventories and purchase the most competitively priced fuel. In sum, the  
9 Company will continue to evaluate market conditions carefully, always seeking to  
10 purchase coal supplies for our customers at economically reasonable prices while  
11 ensuring that the Company's service commitments are reliably and prudently met.

12  
13 **Q. WITH THAT BACKGROUND, HOW MUCH COAL DOES SCE&G PLAN**  
14 **TO PURCHASE IN 2016 UNDER LONG-TERM CONTRACTS?**

15 A. The Company is committed to maintaining reliable supply sources of coal  
16 and, therefore, it must continue to enter into long-term agreements for a portion of  
17 its coal requirements. SCE&G currently has long-term contracts with four suppliers  
18 for the delivery of 1.4 million tons of coal. This quantity represents approximately  
19 40% of SCE&G's expected total coal receipts for 2016. The coal purchased under  
20 these contracts ranges in quality from 12,500 to 12,700 British Thermal Units  
21 ("BTU") per pound and from 1.0% to 1.6% sulfur content. Half of these contracts  
22 are for an initial period of three years, and some of the contracts have options to



1       renew. The amount of coal under contract will vary from year to year, and the  
2       contract terms will vary from contract to contract. For example, in some of our coal  
3       contracts, we have been successful in negotiating fixed pricing for the term of the  
4       contract, while other coal contracts contain predetermined price adjustments.

5               It should be noted that a majority of the Company's term contracts executed  
6       during the Review Period were two-year instead of three-year contracts. Although  
7       we have had limited success in procuring three-year contracts, the overall pricing  
8       for CAPP coal has been depressed such that most suppliers will not enter traditional  
9       three-year contracts due to the fact that their projected production costs and  
10      contracted costs are substantially similar.

11             During 2016, the Company will continue to carefully evaluate its need for  
12      coal in future periods. We anticipate that SCE&G will negotiate additional  
13      commitments for coal supply for 2017 and beyond with the objective of achieving  
14      a reasonable balance between coal supplied under long-term contracts and spot  
15      purchases while obtaining coal at reasonable prices and ensuring that the  
16      Company's supply requirements are reliably and prudently met. To fulfill its future  
17      requirements, the Company may choose to negotiate with existing coal suppliers to  
18      extend or renew existing long-term contracts, may choose to negotiate directly with  
19      other suppliers seeking new contracts, or may decide to issue a general solicitation  
20      for some or all of its needed long-term supply. The Company's goal is always to  
21      provide our customers with reliable coal-fired generation at reasonable fuel prices.

1 We have worked diligently in the past to achieve this goal, and will continue to do  
2 so in 2016 and beyond.

3  
4 **Q. FOR 2016, PLEASE EXPLAIN THE COMPANY'S CURRENT PLANS FOR**  
5 **ADDRESSING ITS NEEDS FOR COAL SUPPLIES UNDER SHORT TERM**  
6 **CONTRACTS.**

7 A. The Company currently has spot contracts with eight suppliers for the  
8 delivery of 1.0 million tons of coal. This quantity represents approximately 29% of  
9 SCE&G's expected total coal receipts for 2016. The projected remaining 31% of  
10 the coal to be purchased in 2016 will be heavily dependent on weather and the  
11 generation produced at the other generation assets employed by SCE&G. The  
12 Company will make additional spot purchases as needed to ensure that sufficient  
13 supply is available for its electricity generation needs at a reasonable price.  
14 Acquiring coal supplies in this manner will provide SCE&G with the flexibility to  
15 manage its generation assets in the most cost effective way, which can vary from  
16 month to month.

1 **Q. GIVEN THE STATE OF THE DOMESTIC COAL MARKET, WILL**  
2 **SUFFICIENT SUPPLIES OF COAL BE AVAILABLE ON THE SPOT**  
3 **MARKET TO MEET THE COMPANY’S GENERATION NEEDS?**

4 A. With utilities across the country relying more heavily on natural gas  
5 generation facilities, the demand for coal has continued to decrease. Even so, coal  
6 suppliers are continuing to produce resulting in an excess supply of domestic coal.  
7 In part, this continued production is the result of federal regulations, which require  
8 coal suppliers to follow certain procedures when closing a mine. Because  
9 compliance with these regulations can be costly, certain coal suppliers elect to  
10 continue operating the mines at a loss instead of closing a mine and discontinuing  
11 coal production so that they do not have to incur these regulatory expenses. These  
12 “zombie mines” as they are known in the industry continue to add to the excess  
13 supply in the coal market, further diminishing coal prices. The Company does not  
14 anticipate that these conditions will change in the short-term and that ample coal  
15 supplies will be available in the foreseeable future. Nevertheless, SCE&G will  
16 continue to monitor the availability of coal in the market and, if coal supplies  
17 dwindle, can secure additional supply on the international coal markets.

18  
19 **Q. HOW DOES SCE&G ENSURE THAT THE RIGHT QUANTITY OF FUEL**  
20 **SUPPLIES IS AVAILABLE TO MEET GENERATION DEMANDS?**

21 A. SCE&G uses several steps to bring the fuel supply and demand factors  
22 together. Fuel usage levels are calculated and forecasted for each of the generating

1 plants. Coal and No. 2 fuel oil inventories are then validated and contract quantities  
2 are summed and compared against system usage to determine needs going forward.  
3 With this information, the Fuel Department carefully evaluates the Company's coal  
4 requirements and determines whether transportation options under current  
5 contracts, spot purchases, or additional long-term agreements are appropriate.  
6 Through this process, SCE&G has been successful in leveraging long-term and  
7 short-term coal purchases to achieve reasonable purchase prices while ensuring the  
8 reliability of coal supplies necessary to support system needs.

9 No. 2 fuel oil is purchased to ensure adequate back up to natural gas for  
10 SCE&G's intermediate and peaking generators. Typically, fuel storage tanks are  
11 filled going into peak usage periods.

12  
13 **Q. HOW DOES THE COMPANY DETERMINE A "REASONABLE PRICE"**  
14 **FOR FUEL PURCHASES?**

15 A. The Fuel Department works diligently to achieve an optimization between  
16 adequate fuel supplies of acceptable quality at reasonable purchase prices. The  
17 ultimate value of the delivered fuel (coal or No. 2 fuel oil) is determined by the  
18 actual delivered cost per Million British Thermal Units ("MMBTU"), accounting  
19 for any fuel impacts in the operation of our generating plants. Market prices  
20 fluctuate due to such things as seasonality, political turmoil, national weather trends,  
21 and domestic/international supply/demand imbalances. SCE&G continuously  
22 evaluates factors that impact prices, while employing contract strategies such as

1       predetermined price adjustments, price collars, and quarterly adjustments to  
2       mitigate the effect market conditions have on coal contracts. Market publications,  
3       indices, industry solicitations, trade associations, and interacting with market  
4       participants are some of the sources and methods that we use to stay abreast of  
5       market trends and conditions.

6  
7   **Q.   HOW DOES THE COMPANY MANAGE COAL INVENTORIES TO**  
8   **ENSURE RELIABILITY AND AVAILABILITY?**

9   A.       To maintain adequate supply at its coal-fired generating facilities, the  
10   Company continuously manages inventories using long-term contracts, spot market  
11   purchases, and transportation options. The Company used these tools in support of  
12   its efforts to maintain an inventory of approximately 680,000 tons of coal during the  
13   Review Period based on the average of each of 12 months' ending inventories to  
14   support anticipated consumption during the Review Period and to maintain enough  
15   coal to run each coal unit at full capacity for approximately 45 days. This  
16   methodology allows for an inventory of more than 680,000 tons at the beginning of  
17   high demand periods and less than 680,000 tons entering the milder months. This  
18   targeted inventory level aids in protecting SCE&G and its customers against lack of  
19   coal availability as well as against production and delivery problems that may arise  
20   from time to time. The coal inventory is also an immediately available resource to  
21   meet our supply needs when short-term market prices are unfavorable. A crucial

1 aspect of the Company's inventory management is balancing its short-term needs  
2 against long-term requirements and expected future operating conditions.  
3

4 **Q. DID THE COMPANY REDUCE ITS COAL INVENTORIES DURING THE**  
5 **REVIEW PERIOD FROM THE PREVIOUSLY MAINTAINED LEVELS?**

6 A. Yes. In recent years, SCE&G maintained an inventory of approximately  
7 782,000 tons, or approximately 102,000 more tons than was maintained during the  
8 Review Period. This reduction in the inventory levels is largely the result of the  
9 conversion of McMeekin Station to a dual fuel facility and increased reliance on the  
10 Company's natural gas generation facilities due to the lower prices and increased  
11 availability of natural gas.  
12

13 **Q. DOES SCE&G ANTICIPATE ANY FURTHER CHANGES IN THE**  
14 **INVENTORY LEVEL OF ITS COAL SUPPLIES IN 2016?**

15 A. Yes. As McMeekin Station burns its current coal supplies and converts  
16 entirely to a natural gas generation facility, the Company's useable coal inventories  
17 will be consumed and whatever coal is remaining, if any, will be transported to  
18 another coal burning facility.  
19  
20  
21

1 **Q. PLEASE PROVIDE AN OVERVIEW OF TRANSPORTATION SERVICES**  
2 **DURING THE REVIEW PERIOD.**

3 A. In 2015, CSX Transportation, Inc. (“CSX”) remained the primary rail  
4 transporter of coal for SCE&G. While the CSX contract rates remained relatively  
5 stable during 2015, the rates were subject to quarterly adjustments according to  
6 indices published by the American Association of Railroads. SCE&G took delivery  
7 of approximately 3.3 million tons of coal under this rail contract during 2015,  
8 representing 97.25% of the Company’s total receipts of coal.

9 The Company also was under contract with Norfolk Southern Railway  
10 Company (“NS” or “Norfolk Southern”) during the Review Period. Norfolk  
11 Southern has only one delivery point in SCE&G’s system, and deliveries under this  
12 NS contract represented 2.75% of the Company’s total receipts in 2015.

13  
14 **Q. DOES SCE&G HAVE ACCESS TO INTERNATIONAL COAL SUPPLIES?**

15 A. Yes. Although the Company did not receive any deliveries of international  
16 coal during the Review Period, SCE&G presently has a long-term contract for ocean  
17 vessel berthing midstream in the Cooper River—the ocean vessel delivery point—  
18 and the barge transportation of coal to Williams Station. This provides SCE&G with  
19 the ability to obtain ocean vessel shipping of coal on a spot or as-needed basis when  
20 prices for international coal are competitive with domestically produced coal. Such  
21 options are important in diversifying the Company’s supply risk and SCE&G will  
22 continue to explore opportunities to utilize different transportation options to reduce

1 costs to our customers while reliably and prudently maintaining access to adequate  
2 supplies for its electric generation needs.

3  
4 **Q. DURING THE REVIEW PERIOD, DID SCE&G EXPERIENCE CHANGES**  
5 **TO ITS CONTRACTS WITH ANY TRANSPORTATION PROVIDERS?**

6 A. Yes. The CSX contract was negotiated during 2014 and became effective  
7 January 1, 2015, providing more favorable shipping rates than the expiring contract.  
8 Moreover, SCE&G has the option under the new contract to transport all of its coal  
9 requirements on CSX, but it is not obligated to do so if a more favorable  
10 transportation option is identified, such as by other railroad providers or by barge.  
11 Additionally, SCE&G is in the process of renegotiating both its contract with  
12 Norfolk Southern and its ocean vessel berthing provider for coal transportation  
13 services in 2016 and after.

14  
15 **Q. PLEASE DESCRIBE THE STATE OF THE INTERNATIONAL COAL**  
16 **MARKET IN WHICH SCE&G PARTICIPATES AND ITS CURRENT**  
17 **PLANS REGARDING IMPORT COAL.**

18 A. International coal prices continued to be competitive over the Review Period,  
19 with the Company continuing to monitor the use of international coal in SCE&G's  
20 system. International coal production has recently started to decrease due to  
21 reductions in demand for both thermal and metallurgical coal. These decreases in  
22 demand and production have been caused by many factors, including increased



1 international use of renewable energy, currency valuation changes, weakness in  
2 international economies, increased hydroelectric generation, and changes in supply  
3 economics around the world. During the Review Period, export coal shipments from  
4 United States ports decreased because the coal prices were not competitive in the  
5 global market with primarily shipments under long term contract being exported.  
6 As a result of this continued over production, weakening demand in foreign markets  
7 and the decreasing demand in domestic markets, domestic coal prices are projected  
8 to remain at or near current levels in the short-term and expected to remain relatively  
9 stable.

10 In sum, international coal prices were not competitive with domestic coal  
11 prices in prior years. Now, however, given the substantial supply of coal in the  
12 international market for both thermal and metallurgical coal, international coal  
13 prices—including transportation costs—are competitive with domestic coal prices.  
14 SCE&G will continue to monitor and remain informed of opportunities to purchase  
15 international coal as part of its ongoing effort to reduce fuel costs for both SCE&G  
16 and its customers and to ensure that an adequate supply of coal is available to meet  
17 its generation needs.

1 **Q. WHAT WERE SCE&G'S DELIVERED COAL COSTS FOR THE REVIEW**  
2 **PERIOD?**

3 A. SCE&G's average delivered cost in dollars per MMBTU by month for coal  
4 purchased for steam plants during the Review Period is set forth in Table 1.

5 **Table 1**

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
\$3.71	\$3.80	\$3.75	\$3.71	\$3.59	\$3.88	\$3.68	\$3.53	\$3.72	\$3.99	\$3.70	\$3.64

6  
7 **Q. WHAT CHANGES DOES THE COMPANY ANTICIPATE IN THE COAL**  
8 **MARKET FOR THE 2016 FORECASTED PERIOD?**

9 A. SCE&G's coal prices for the forecasted period are expected to remain stable  
10 at current levels. Over the past 12 months, the price per ton of CAPP coal decreased  
11 from \$50.60 per ton on January 5, 2015, to \$36.10 per ton on October 12, 2015,  
12 representing approximately a 40.0% price decrease. Spot coal prices have been  
13 trending flat early in 2016 to approximately \$38.50 per ton on January 18, 2016. In  
14 this market, the Company potentially could reduce its coal purchase costs if it can  
15 make spot purchases of coal at prices below its long-term contract prices. However,  
16 we do not presently expect any further substantial price reductions in 2016 and  
17 anticipate that spot prices will trend upward to moderate levels.

18 Global demand for coal, particularly metallurgical coal used to produce steel,  
19 has resulted in fluctuations in price and production of both domestic metallurgical

1 and thermal coal in the recent past. Despite the recent downturn in demand in  
2 international markets, the long-term trend is for coal consumption in foreign  
3 markets to grow. This growth reflects the continued trend for coal as the fuel of  
4 choice in developing economies. However, this trend is the opposite direction of  
5 where most developed nations putting an emphasis on lower emitting forms of  
6 energy. Even with the projected long-term growth of coal consumption in European  
7 as well as Asian markets, the increased use of natural gas for power generation and  
8 decreased industrial demand for coal domestically will continue to force coal  
9 companies in the United States to reduce production to conform to overall reduced  
10 demand for coal as an energy source.

11 Other factors that will continue to affect CAPP coal prices are a dwindling  
12 active coal reserve base, an increased number of coal suppliers exiting the market,  
13 greater regulation by the Environmental Protection Agency (“EPA”) and Mine  
14 Safety and Health Administration, and the redeployment of capital dollars away  
15 from coal mining. These mounting issues will lead to a more limited ability to  
16 borrow money for recapitalization of mines in general, and the inability of mining  
17 companies to acquire new mining permits. These factors will continue to put upward  
18 pressure on coal production costs during 2016 and beyond. Notwithstanding these  
19 upward pressures, the Company expects coal prices to remain relatively stable in  
20 2016. This expected stability in coal prices is based primarily on the low cost of  
21 natural gas, new combined cycle gas generation capacity outside of SCE&G’s

service area, and continued decommissioning of coal consuming power plants, all of which reduces the demand for coal.

**Q. WHAT HAS BEEN THE RECENT PRICING TREND IN THE NO. 2 FUEL OIL INDUSTRY?**

A. Delivered No. 2 fuel oil average monthly prices during the Review Period ranged from a high of \$25.85/MMBTU in March 2015 to a low of \$10.23/MMBTU in December 2015.

Set forth below is Table 2 that shows the average system delivered No. 2 fuel oil prices in dollars/MMBTU for the Review Period for No. 2 fuel oil purchased for steam plants, gas turbines, and combined cycle units.

**Table 2**

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
\$14.19	\$16.10	\$25.85	\$15.03	\$16.10	\$15.12	\$14.50	\$12.56	N/A	\$12.35	\$11.01	\$10.23

**Q. WHAT ADDITIONAL STEPS IS THE COMPANY TAKING TO MITIGATE FUEL-RELATED EXPENSES?**

A. SCE&G continuously tries to reduce costs by purchasing coal of lower quality where practicable and acceptable to a coal-burning plant. During 2015, SCE&G elected to take delivery of coals purchased mainly on the OTC “Over the Counter” trading market. Generally these coals could be purchased at a lower

1 delivered cost than lower quality coals purchased directly from a coal supplier.  
2 SCE&G will continue with this practice until it is no longer beneficial or different  
3 coals need to be purchased for testing. These coals were consumed at SCE&G's  
4 Cope, Williams, and Wateree Stations.

5 SCE&G also continues to evaluate the fuel flexibility for all of its coal-fired  
6 plants. This evaluation considers fuels from different regions of the United States  
7 and South America with multiple sulfur, ash, and BTU levels. Currently,  
8 transportation rates, and in some cases original plant design, lead to a situation in  
9 which coal from other basins is non-competitive with CAPP coal due in large part  
10 to significant differences in coal qualities that could impact plant operations.

11 As discussed above, the Company in recent periods has increased the balance  
12 of its coal purchases away from long-term agreements in favor of spot purchases  
13 due to the price competitiveness of spot coal. And, with respect to all of its fuel  
14 purchases, the Company continuously evaluates opportunities for leveraging  
15 transportation options to obtain lower delivered rates.

16  
17 **Q. WHAT RESPONSIBILITIES DOES THE FUEL DEPARTMENT HAVE**  
18 **WITH RESPECT TO SO<sub>2</sub> AND NO<sub>x</sub> ALLOWANCES?**

19 A. The Fuel Department purchases or trades EPA sulfur dioxide ("SO<sub>2</sub>") and  
20 nitrogen oxides ("NO<sub>x</sub>") emission allowances as needed by SCE&G to compensate  
21 for its SO<sub>2</sub> emissions. SO<sub>2</sub> emission allowance prices stabilized during the Review  
22 Period due to the increased reliance on natural gas for electric generation and the

1 addition of scrubbers in the industry, as well as continued uncertainty over EPA  
2 modifications to environmental regulations for the utility industry. Clean Air  
3 Interstate Rule (CAIR) SO<sub>2</sub> emission allowances currently are approximately \$1.00  
4 per allowance (one ton SO<sub>2</sub>) and the Company anticipates that this cost will continue  
5 to remain stable in the near-term. Current annual Cross State Air Pollution Rule  
6 (CSAPR) SO<sub>2</sub> and NO<sub>x</sub> allowance prices are approximately \$3.00 (one ton SO<sub>2</sub>)  
7 and \$90 per ton of NO<sub>x</sub> which are also expected to remain stable at that level in the  
8 near-term.

9  
10 **Q. PLEASE EXPLAIN THE FUEL DEPARTMENT'S ACTIVITIES RELATED**  
11 **TO THE PROCUREMENT OF LIMESTONE FOR SCE&G'S POLLUTION**  
12 **CONTROL FACILITIES.**

13 A. The Fuel Department is responsible for securing adequate and reliable  
14 supplies of limestone for the effective operation of wet limestone scrubbers at the  
15 Company's Wateree and Williams Stations. There continue to be limited suppliers  
16 for limestone for Williams and Wateree Stations. During the Review Period, the  
17 Company acquired all of its supplies of limestone from a single source, which has  
18 proven to be effective and market priced.

19 The limestone is delivered to Williams and Wateree Stations by truck since  
20 the current source of supply is located near the plants. In summary, the Company  
21 continues to evaluate supply and transportation options designed to ensure adequate

1 and reliable supplies of limestone at reasonable prices at its Williams and Wateree  
2 Stations.

3  
4 **Q. WHAT REQUEST DOES SCE&G MAKE OF THE COMMISSION IN THIS**  
5 **PROCEEDING?**

6 A. The Coal and Oil Procurement Department has made reasonable and prudent  
7 efforts to obtain reliable, high quality supplies of coal, No. 2 fuel oil and limestone  
8 and associated transportation at the lowest possible cost to SCE&G's customers.  
9 Therefore, on behalf of SCE&G, I respectfully request that the Commission find  
10 that the Company's fuel purchasing practices were reasonable and prudent for the  
11 Review Period.

12  
13 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

14 A. Yes.